OIPE JC10 APR 11 2003

UNITED STATES PATENT AND TRADEMARK OFFICE

03-21-03 A09:21 IN

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U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/019,198	Christopher Gregory Proud	9013-42

INTERNATIONAL APPLICATION NO.
PCT/GB00/02414

I.A. FILING DATE	PRIORITY DATE
06/21/2000	06/21/1999

20792
MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627

CONFIRMATION NO. 1487
371 FORMALITIES LETTER

OC000000009654948

Date Mailed: 03/18/2003

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):
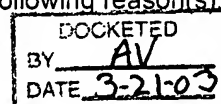
- U.S. Basic National Fee
- Priority Document
- Assignee Statement
- Biochemical Sequence Diskette
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Information Disclosure Statements
- Oath or Declaration
- Preliminary Amendments

Applicant's response filed 02/13/2003 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 04/23/2002 have not been completed.

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

DOCKETED
BY AV
DATE 3-21-03

- This application does not contain a "Sequence Listing" as a separate part of the disclosure on paper copy or compact disc, as required by 37 CFR 1.821(c).
- The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- APPLICANT MUST PROVIDE:
  - An initial or substitute computer readable form (CRF) of the "Sequence Listing."
  - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.

- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
  - For Rules Interpretation, call (703) 308-4216
  - To Purchase PatentIn Software, call (703) 306-2600
  - For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)
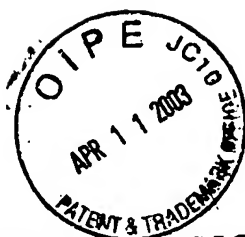
A copy of this notice MUST be returned with the response.

PATRICIA A BOOKER

Telephone: (703) 305-3738

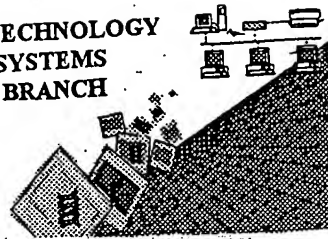PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/019,198	PCT/GB00/02414	9013-42

FORM PCT/DO/EO/916 (371 Formalities Notice)

RAW SEQUENCE LISTING
ERROR REPORT

OIPE JC10
APR 11 2003
PATENT & TRADEMARK OFFICE

BIOTECHNOLOGY
SYSTEMS
BRANCH

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: ___10/019,198___

Source: ___PCT10___

Date Processed by STIC: ___3|6|03___

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual - ePAVE)
2. **U.S. Postal Service:** U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
   Or
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. **Federal Express, United Parcel Service, or other delivery service to:** U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 10/019,198

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1____ Wrapped Nucleics Wrapped Aminos
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2____ Invalid Line Length
The rules require that a line not exceed 72 characters in length. This includes white spaces.

3____ Misaligned Amino Numbering
The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4____ Non-ASCII
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5____ Variable Length
Sequence(s)____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6____ PatentIn 2.0 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7.____ Skipped Sequences (OLD RULES)
Sequence(s) ____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES: response to include the skipped sequences.

8____ Skipped Sequences (NEW RULES)
Sequence(s) ____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9____ Use of n's or Xaa's (NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.

10.✓ Invalid <213> Response
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11____ Use of <220>
Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12____ PatentIn 2.0 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13____ Misuse of n
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH – Biotechnology Systems Branch – 08/21/2001

‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖

Does Not Comply   **PCT10**
Correcti   ~e Needed

RAW SEQUENCE LISTING   DATE: 03/06/2003
PATENT APPLICATION: US/10/019,198   TIME: 13:10:22

Input Set : A:\9013.42.txt
Output Set: N:\CRF4\03062003\J019198.raw

```
 3 <110> APPLICANT: UNIVERSITY COURT OF THE UNIVERSTIY OF DUNDEE
 5 <120> TITLE OF INVENTION: USE OF PEPTIDES
 7 <130> FILE REFERENCE: 9013.42
 9 <140> CURRENT APPLICATION NUMBER: US 10/019,198
C--> 10 <141> CURRENT FILING DATE: 2001-12-20
12 <150> PRIOR APPLICATION NUMBER: PCT/GB00/02414
13 <151> PRIOR FILING DATE: 2000-06-21
15 <150> PRIOR APPLICATION NUMBER: GB9914480.0
16 <151> PRIOR FILING DATE: 1999-06-21
18 <160> NUMBER OF SEQ ID NOS: 6
20 <170> SOFTWARE: PatentIn version 3.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 12
24 <212> TYPE: PRT
25 <213> ORGANISM: Homo sapiens
27 <400> SEQUENCE: 1
29 Lys Lys Arg Tyr Asp Arg Glu Phe Leu Leu Gly Phe
                                          10
30 1               5
32 <210> SEQ ID NO: 2
33 <211> LENGTH: 12
34 <212> TYPE: PRT
35 <213> ORGANISM: Triticum aestivum
37 <400> SEQUENCE: 2
39 Arg Val Arg Tyr Ser Arg Asp Gln Leu Leu Asp Leu
40 1               5               10
42 <210> SEQ ID NO: 3
43 <211> LENGTH: 10
44 <212> TYPE: PRT
45 <213> ORGANISM: Homo sapiens
47 <220> FEATURE:
48 <221> NAME/KEY: VARIANT
49 <222> LOCATION: (10)..(10)
50 <223> OTHER INFORMATION: Xaa REPRESENTS L OR M
53 <400> SEQUENCE: 3
W--> 55 Arg Ile Ile Tyr Asp Arg Lys Phe Leu Xaa
56 1               5               10
58 <210> SEQ ID NO: 4
59 <211> LENGTH: 7
60 <212> TYPE: PRT
C--> 61 <213> ORGANISM: Artificial/Unknown
63 <220> FEATURE:
64 <221> NAME/KEY: VARIANT
65 <222> LOCATION: (2)..(5)
```

can only be one or the other, not both
See error summary sheet item 10

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/019,198

DATE: 03/06/2003
TIME: 13:10:22

Input Set : A:\9013.42.txt
Output Set: N:\CRF4\03062003\J019198.raw

```
        66 <223> OTHER INFORMATION: Xaa REPRESENTS ANY AMINO ACID
        69 <220> FEATURE:
        70 <221> NAME/KEY: PEPTIDE
        71 <222> LOCATION: (1)..(7)
        72 <223> OTHER INFORMATION: consensus peptide
        75 <220> FEATURE:
        76 <221> NAME/KEY: VARIANT
        77 <222> LOCATION: (7)..(7)
        78 <223> OTHER INFORMATION: Xaa REPRESENTS LEU, MET OR PHE
        81 <400> SEQUENCE: 4
W-->    83 Tyr Xaa Xaa Xaa Xaa Leu Xaa
        84 1               5
        86 <210> SEQ ID NO: 5
        87 <211> LENGTH: 10
        88 <212> TYPE: PRT
C-->    89 <213> ORGANISM: Artificial/Unknown        - same error
        91 <220> FEATURE:
        92 <221> NAME/KEY: VARIANT
        93 <222> LOCATION: (1)..(1)
        94 <223> OTHER INFORMATION: Xaa REPRESENTS K OR R
        97 <220> FEATURE:
        98 <221> NAME/KEY: PEPTIDE
        99 <222> LOCATION: (1)..(10)
       100 <223> OTHER INFORMATION: consensus peptide
       103 <220> FEATURE:
       104 <221> NAME/KEY: VARIANT
       105 <222> LOCATION: (2)..(3)
       106 <223> OTHER INFORMATION: Xaa REPRESENTS ANY AMINO ACID
       109 <220> FEATURE:
       110 <221> NAME/KEY: VARIANT
       111 <222> LOCATION: (5)..(7)
       112 <223> OTHER INFORMATION: Xaa REPRESENTS ANY AMINO ACID
       115 <220> FEATURE:
       116 <221> NAME/KEY: VARIANT
       117 <222> LOCATION: (8)..(8)
       118 <223> OTHER INFORMATION: Xaa REPRESENTS F OR Q
       121 <220> FEATURE:
       122 <221> NAME/KEY: VARIANT
       123 <222> LOCATION: (10)..(10)
       124 <223> OTHER INFORMATION: Xaa REPRESENTS L OR M
       127 <400> SEQUENCE: 5
W-->   129 Xaa Xaa Xaa Tyr Xaa Xaa Xaa Xaa Leu Xaa
       130 1               5               10
       132 <210> SEQ ID NO: 6
       133 <211> LENGTH: 16
       134 <212> TYPE: PRT
C-->   135 <213> ORGANISM: Artificial/Unknown    - same error
       137 <220> FEATURE:
       138 <221> NAME/KEY: PEPTIDE
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/019,198

DATE: 03/06/2003
TIME: 13:10:22

Input Set : A:\9013.42.txt
Output Set: N:\CRF4\03062003\J019198.raw

139 <222> LOCATION: (1)..(16)
140 <223> OTHER INFORMATION: penetratin: membrane translocation peptide
143 <400> SEQUENCE: 6
145 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
146 1   5   10   15

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 03/06/2003
PATENT APPLICATION: US/10/019,198   TIME: 13:10:23

Input Set : A:\9013.42.txt
Output Set: N:\CRF4\03062003\J019198.raw

<u>Please Note:</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 10
Seq#:4; Xaa Pos. 2,3,4,5,7
Seq#:5; Xaa Pos. 1,2,3,5,6,7,8,10

VERIFICATION SUMMARY   DATE: 03/06/2003
PATENT APPLICATION: **US/10/019,198**   TIME: 13:10:23

Input Set : **A:\9013.42.txt**
Output Set: **N:\CRF4\03062003\J019198.raw**

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:55 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:61 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:83 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:89 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:135 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6